

Title (en)
LED DEVICE AND PREPARATION METHOD THEREOF

Title (de)
LED-VORRICHTUNG UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
DISPOSITIF À DEL ET SON PROCÉDÉ DE PRÉPARATION

Publication
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Application
EP 12851041 A 20121123

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• CN 201110382203 A 20111125
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Abstract (en)
[origin: EP2784830A1] The present invention provides a light-emitting diode (LED) device and a method for manufacturing the same. The LED device comprises: a substrate (1); a chip (2) disposed on the substrate (1); and a first lens (3) disposed on the substrate (1) and spaced from the chip (2); wherein the first lens (3) comprises luminescent powder (7) and at least one of light-diffusing particles (8) and light-reflecting particles (10). The LED device provided by the present invention has a high luminous efficiency, and solves the problem in the prior art that the LED device has a small angle of emergence and the emergent light emergence lacks of uniformity.

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Citation (search report)
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• [Y] DE 102006020529 A1 20070301 - OSRAM OPTO SEMICONDUCTORS GMBH [DE]
• [Y] US 2011001151 A1 20110106 - LE TOQUIN RONAN [US]
• [A] DE 102008045331 A1 20100304 - OSRAM OPTO SEMICONDUCTORS GMBH [DE]
• [A] WO 2007085977 A1 20070802 - PHILIPS INTELLECTUAL PROPERTY [DE], et al
• See references of WO 2013075654A1

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